IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the PATENT APPLICATION of:		
	Po-Chao Tan et al.	Our File: OP092000246
Application No.:	10/685,451	Date: December 1, 2006
Filed:	October 16, 2003	
For:	Tail Structure of Electric Wire	
Group:	2833	
Examiner:	Gilman, Alexander	

Inquire the Status of Patent Application

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This above-referenced patent application was mistakenly rendered as abandoned by USPTO. On July 20, 2004, Applicants filed through facsimile a Reply to the first April 22, 2004 Office Action. (Please see the attached copy of Auto-Reply Facsimile Transmission of USPTO dated July 20,2004, the attachments includes a copy of the Reply submitted on July 20, 2004 and the Abandonment Notice of USPTO). Unfortunately, on November 1, 2004, Applicants received an abandonment notice from USPTO for this particular application, in the notice, USPTO stated that the abandonment is due to Applicants failed to respond to an Office Action on time. Apparently the timely-filed Reply dated July 20, 2004 was misplaced.

On January 3, 2005, Applicants submitted a petition including all relevant documents to USPTO and tried to straight out the mistake, however, their effort was in vein. The undersigned attorney has

checked the status of the above-referenced application through PAIR and could not find any status information nor any relevant documents regarding to this application either.

Therefore, the undersigned attorney respectfully request the proper records of this application be restored and this application can be continuously prosecuted.

Respectfully submitted,

By /Kao H. Lu/___
Kao H. Lu, Esquire
Registration No. 43,761
(610) 446-2563

1425 E. Darby Road
Havertown, Pa 19083

DATE: January 3, 2005
DOCKET NO. : OP-092000246
APPLICANT(S): Po-Chao Tan et al.
SERIAL NO.: 10/685,451
FILED: October 16, 2003
FOR: Tail structure of electric wire

PAPERS FILED:

Petition to withdraw holding of abandonment (2 pages)
Evidence of response to office action (12 page) as attachment

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/685,451	10/16/2003	Po-Chao Tan	OP-092000246	5416

7590 11/01/2004

Yi-Wen Tseng
#D306
509 ROOSEVELT BLVD.
FALLS CHURCH, VA 22044

EXAMINER	
GILMAN, ALEXANDER	
ART UNIT	PAPER NUMBER
2833	

DATE MAILED: 11/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Notice of Abandonment	Application No.	Applicant(s)	
	10/685,451	TAN ET AL.	
	Examiner	Art Unit	
	Alexander D Gilman	2833	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

This application is abandoned in view of:

1. ☒ Applicant's failure to timely file a proper reply to the Office letter mailed on *22 April 2004*.
   (a) ☐ A reply was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply (including a total extension of time of _____ month(s)) which expired on _____.
   (b) ☐ A proposed reply was received on _____, but it does not constitute a proper reply under 37 CFR 1.113 (a) to the final rejection.
   (A proper reply under 37 CFR 1.113 to a final rejection consists only of: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114).
   (c) ☐ A reply was received on _____ but it does not constitute a proper reply, or a bona fide attempt at a proper reply, to the non-final rejection. See 37 CFR 1.85(a) and 1.111. (See explanation in box 7 below).
   (d) ☒ No reply has been received.

2. ☐ Applicant's failure to timely pay the required issue fee and publication fee, if applicable, within the statutory period of three months from the mailing date of the Notice of Allowance (PTOL-85).
   (a) ☐ The issue fee and publication fee, if applicable, was received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the statutory period for payment of the issue fee (and publication fee) set in the Notice of Allowance (PTOL-85).
   (b) ☐ The submitted fee of $_____ is insufficient. A balance of $_____ is due.
   The issue fee required by 37 CFR 1.18 is $_____. The publication fee, if required by 37 CFR 1.18(d), is $_____.
   (c) ☐ The issue fee and publication fee, if applicable, has not been received.

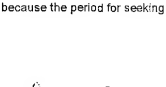
3. ☐ Applicant's failure to timely file corrected drawings as required by, and within the three-month period set in, the Notice of Allowability (PTO-37).
   (a) ☐ Proposed corrected drawings were received on _____ (with a Certificate of Mailing or Transmission dated _____), which is after the expiration of the period for reply.
   (b) ☐ No corrected drawings have been received.

4. ☐ The letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants.

5. ☐ The letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application.

6. ☐ The decision by the Board of Patent Appeals and Interference rendered on _____ and because the period for seeking court review of the decision has expired and there are no allowed claims.

7. ☐ The reason(s) below:



Petitions to revive under 37 CFR 1.137(a) or (b), or requests to withdraw the holding of abandonment under 37 CFR 1.181, should be promptly filed to minimize any negative effects on patent term.

Auto-Reply Facsimile Transmission

TO: Fax Sender at 7035914934

Fax Information
Date Received: 7/20/2004 11:00:07 AM [Eastern Daylight Time]
Total Pages: 13 (including cover page)

ADVISORY: This is an automatically generated return receipt confirmation of the facsimile transmission received by the Office. Please check to make sure that the number of pages listed as received in Total Pages above matches what was intended to be sent. Applicants are advised to retain this receipt in the unlikely event that proof of this facsimile transmission is necessary. Applicants are also advised to use the certificate of facsimile transmission procedures set forth in 37 CFR 1.8(a) and (b), 37 CFR 1.6(f). Trademark Applicants, also see the Trademark Manual of Examining Procedure (TMEP) section 306 et seq.

Received
Cover
Page
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Jul 20 04 11:01a Jiang 7035914934 p.1

YI-WEN TSENG
4331 STEVENS BATTLE LN
FAIRFAX, V.A. 22033
TELEPHONE/FAX:
(703) 591-4934

Facsimile Transmittal

To:	United States Patent and Trademark Office Examiner Gilmore, Alexander	Fax:	703-872-9306
From:	Yi-Wen Tseng for Inventors Po-Chee Tan et al.	Date:	2004/7/20
Docking No.:	OP-292000246	Pgs: (including this page):	13
Serial No.:	10/665,451	Re:	Amendment

☐ Urgent ☒ For Review ☐ Please Comment ☒ Please Reply ☐ Confirmation by Mail

ENCLOSURES:
Amendment (12 Pages)

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office (Facsimile No. (703) 872-9306 on July 20, 2004)

Yi-Wen Tseng

Yi-Wen Tseng
(Signature)

YI-WEN TSENG
4331 STEVENS BATTLE LN
FAIRFAX, V.A. 22033
TELEPHONE/FAX:
(703) 591-4934

Facsimile Transmittal

To:	**United States Patent and Trademark Office Examiner Gilman, Alexander**	Fax:	**703-872-9306**
From:	**Yi-Wen Tseng for Inventors Po-Chao Tan et al.**	Date:	**2004/7/20**
Docking No..:	**OP-092000246**	Pgs. (including this page):	**13**
Serial No..:	**10/865,451**	Re:	**Amendment**

☐ **Urgent** ☑ **For Review** ☐ **Please Comment** ☑ **Please Reply** ☐ **Confirmation by Mail**

ENCLOSURES:
Amendment (12 Pages)

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the U.S. Patent and Trademark Office (Facsimile No. (703) 872-9306 on July 20, 2004.)

Yi-Wen Tseng

_____
(Signature)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit: 2833
Examiner: GILMAN, ALEXANDER

In Re PATENT APPLICATION Of:

Applicant(s)	:	Po-Chao Tan et al.	
Serial No.	:	10/685,451	
Filed	:	October 16, 2003	**AMENDMENT**
For	:	TAIL STRUCTURE OF ELECTRIC WIRE	
Docket NO.	:	OP-092000246	

Mail Stop Non-Fee Amendment
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Responsive to the Office Action dated April 22, 2004, please amend the above-identified application as follows:

AMENDMENTS TO THE CLAIMS:

1. (Currently amended) ~~An improved~~ A tail structure of an electric wire, comprising a hard terminal with one end connected to a soft electric wire; a buffering structure wrapping around a junction of the hard terminal and the soft electric wire; and a soft layer wrapping around the hard terminal, wherein the soft layer extends across the buffering structure to the soft electric wire, such that the buffering structure and a part of the soft electric wire are wrapped thereby.

2. (Original) The tail structure according to Claim 1, wherein the hard terminal includes the other end serving as a measuring terminal.

3. (Original) The tail structure according to Claim 1, wherein the hard terminal includes a snapping mechanism protruding therefrom, and the soft layer includes a hole formed therein to engage with the snapping mechanism.

4. (Original) The tail structure according to Claim 1, wherein the soft layer is fabricated from plastic.

5. (Original) The tail structure according to Claim 1, wherein the soft layer is fabricated from rubber.

6. (New) A testing probe, comprising:

a hand-held portion;

a measuring terminal protruding from a first end of the hand-held portion;

a soft electric wire connected to a second end of the hand-held portion, the soft electric wire being electrically connected to the measuring terminal;

a buffering structure wrapping a junction between the hand-held portion and the soft electric wire, the buffering structure having a predetermined softness allowing the soft electric wire wrapped thereby to bend therewith;

a removable soft layer wrapping at least a portion of the hand-held portion, the entire buffering structure and at least a portion of the electric wire.

7. (New) The testing probe according to Claim 6, wherein the hand-held portion is fabricated from hard insulation material.

8. (New) The testing probe according to Claim 6, further comprising a conductive filament extending from the measuring terminal to a bare portion of the soft electric wire within the hand-held portion.

9. (New) The testing probe according to Claim 6, wherein the removable soft layer is secured to the hand-held portion by at least one snapping mechanism.

REMARKS

This is in response to the Office Action dated April 22, 2004. In the Office Action, Claims 1-5 were rejected under 35 U.S.C. 103(a) over Nightingale et al. in view of O'Hara et al. or Domingues. The rejection is respectfully traversed according to the following reasons. Claim 1 was amended to delete the unnecessary word "improved" only. New Claims 6-9 were added without adding any new matter. It is respectfully submitted that, as amended, all the pending claims are patentable.

Rejection Under 35 U.S.C. 103(a)

Claims 1-5 were rejected under 35 U.S.C. 103(a) as being unpatentable over Nightingale et al. in view of O'Hara et al. or Domingues.

Cited References

Nightingale et al.

Nightingale et al. discloses an exterior design of a head assembly for a switchable electrical test probe. The design includes a terminal portion, a switching portion on which a switch is formed, a tail portion of the switching portion, and a wire protruding from the tail portion. Nightingale et al. does not disclose the electric wire being a soft electric wire. Nightingale et al. does not specify any of these portions being a hard terminal, a buffering structure, or a buffering structure of the junction of the hard terminal and the soft electric wire, either. Nightingale et al. does not disclose any "snapping mechanism" at all. It is understood that a disclosure of similar exterior

feature does not inherently teach the material and function of such exterior feature. For example, the Examiner contended that Nightingale et al. discloses the hard terminal, but it appears to the Applicants that nowhere does Nightingale et al. show such teaching.

More importantly, as understood, the intended purpose of a design patent is the exterior feature as shown in the submitted drawings. According to *MPEP* 2143.01, if the proposed modification would render the prior invention being modified unsatisfactory for its intended purpose, then there is no suggestion or modification to make the proposed modification. *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Should Nightingale et al. be modified by incorporating any soft layer to cover a substantial portion of the exterior feature, the intended purpose of the design patent is rendered unsatisfactory, and there is no suggestion or motivation to make such proposed modification.

O'Hara et al.

O'Hara et al. discloses an electric test probe having integral strain relief and ground connection. As cited by the Examiner, O'Hara et al. teaches "an insulating material 28, such as a thermoplastic elastomer, is molder around a substantial portion of the elongate electrically conductive hollow body 12 and a portion of the conductive cable 26 to provide electric insulation and strain relief" (col. 2, lines 65-69 as cited by the Examiner). Indeed, the insulating material 28 extends across the hollow conductive body 12 and the conductive cable 26. However, neither the hollow conductive body 12

nor the conductive cable 26 being a hard terminal, buffering structure or a soft electric wire. As a matter of fact, without teaching the hard terminal, the soft electric wire, and particularly the buffering structure wrapping around a junction between the hard terminal and the soft electric wire, there is no suggestion or motivation that such insulation material 28 can be used to wrap around the hard terminal extending across the buffering structure, so as to enhance the connection strength between the hard terminal and the soft electric wire.

Domingues

Domingues teaches an immersible electrical coupling, of which an inner molding 32 made of elastomer is applied onto the inner sheath 17 and the metal part 8. An outer molding 33 made of an elastomer is applied over the cable insulating sheath 13, the metal parts 16, 12, 8 and 10, and against the exposed annulus of the metal part 9. The molding 33 thus covers all of the metal part 9 which surrounded by the external coupling sleeve 31. (col. 2, lines 58-65). The structure as disclosed by Domingues does not even include a buffering structure and a soft electric wire, there is not even an implication that such molding 32 or 33 can be used as a soft layer extends across the buffering structure to the soft electric wire.

Claim 1, 4 and 5

The Examiner contended:

"*With regard to claims 1, 4, 5, Nightingale et al (US Des. 344,661) disclose tail structure of an electric wire, comprising a hard terminal with one end connected to a soft electric wire; a buffering structure wrapping around a junction of the hard terminal of the hard terminal and the soft electric wire;*

Nightingale et al explicitly do ***not*** *disclose soft layer wrapping around the hard terminal, wherein the soft layer extends across the buffering structure to the soft electric wire, such that the buffering structure and a part of the soft electric wire are wrapped thereby.*

O'Hara et al. (US 5,061,892) disclose (col. 2, lines 64-68) the soft layer (made from plastic) extends across the buffering structure to the soft electric wire.

Domingues (US 4,790,768) discloses (col. 2, lines 59-62) that soft layer (made of elastomer, which can be a rubber) extends across the buffering structure to the soft electric wire.

Firstly, as mentioned above, Nightingale et al. disclose an ornamental design for a test probe. Such disclosure does not provide the information regarding the material and the functions of any portion of the test probe apart from the switchable feature as shown in Figures 1-3. Nightingale et al. fail to teach any portion of the test probe being a hard terminal, Nightingale et al. do not specifically discloses such electric wire being a soft electric wire either. Nightingale et al. also fail to teach a junction between the hard terminal and the electric wire. Further, as stated by the Examiner, Nightingale et al. fail to teach the soft layer which wraps around the hard terminal and extends across

the buffering structure, such that the buffering structure and a part of the soft electric wire is wrapped thereby.

O'Hara et al. teache an insulation material covering a conductive hollow body and a conductive cable. O'Hara et al. do not disclose the soft layer **extend across the buffering structure to the soft electric wire**, for O'Hara et al. do not even teach the buffering structure and the soft electric wire at all.

Domingue teaches inner and outer moldings 31 and 32 covering as sheath and metal parts. Domingue does not teach any soft electric wire, hard terminal or the buffering structure at all. Therefore, Domingues **does not** teach soft layer **extend across the buffering structure to the soft electric wire**.

In fact, none of the cited references, Nightingale et al., O'Hara et al., and Domingue, individually or in combination, teaches "a soft layer wrapping around the hard terminal, wherein the soft layer **extends across the buffering structure to the soft electric wire, such that the buffering structure and a part of the soft electric wire are wrapped thereby**. That is, none of them teaches two layers structure including the outer soft layer wrapping the inner buffering structure so that the connection strength between the hard material and the soft electric wire is thus enhanced to prevent from breaking or peeling the soft electric wire off by iterative stretch, folding and bending operations, and the folding and bending capability of the testing probe is doubled and the lifetime thereof is increased (page 3, line 24 through page 4, line 2 of the present application).

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or the combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claimed limitations.

There is not any suggestion or desirability for combining Nightingale et al. with either O'Hara et al. or Domingue. Further, even if Nightingale et al. should be modified or combined by the teaching of O'Hara et al. or Domingue, no reasonable expectation of success is foreseeable. Thirdly, the combination does not teach or suggest all the claimed limitations, particularly the hard terminal, the buffering structure, and a part of the soft electric being wrapped by the soft layer. Therefore, the Examiner does not meet with the requirement of establishing a *prima facie* case of obviousness. The rejection over Claims 1, 4 and 5 are thus respectfully traversed.

Claim 2

Claim 2 is a dependent claim of the patentable Claim 1 and is believed patentable.

Claim 3

The Examiner contended:

With regard to claim 3, Nightingale et al when modified by O'Hara et al. or Domingue disclose (Nightingale et al.) that the hard terminal terminal includes a snapping mechanism protruding therefrom.

The Applicants cannot find any teaching of the snapping mechanism protruding from the hard terminal from Nightingale et al., O'Hara et al. or Domingue. It will be appreciated that the Examiner would kindly specify such teaching from the above cited reference for supporting the rejection. Further, even if such teaching can be found in any of the above references, a hole formed therein to engage with the snapping mechanism is not disclosed at all. Therefore, again, a *prima facie* case of obviousness is not established, and the rejection is respectfully traversed.

Newly Added Claims

Claim 6

Neither Nightingale et al., nor O'Hara et al., nor Domingue teach a buffering structure wrapping a junction between the hand-held portion and the soft electric wire, the buffering structure having a predetermined softness allowing the soft electric wire wrapped thereby to bend therewith, and a removable soft layer wrapping at least a portion of the hand-held portion, the entire buffering structure and at least a portion of the electric wire.

Although it is not explicitly disclosed in the specification, the removable feature of the soft layer as claimed in Claim 6 and the snapping mechanism as claimed in Claim 3 allows the user to replace the soft layer should it is worn out or damaged, such that lifetime of the test probe can be prolonged.

Claim 7

Nightingale et al., O'Hara et al., and Domingue, individually or in combination, fail to teach "the hand-held portion being made of hard insulation material" as claimed in Claim 7.

Claim 8

Nightingale et al., O'Hara et al., and Domingue, individually or in combination, fail to teach "a conductive filament extending from the measuring terminal to a bare portion of the soft electric wire within the hand-held portion" as claimed in Claim 8.

Claim 9

Nightingale et al., O'Hara et al., and Domingue, individually or in combination, fail to teach "removable soft layer is secured to the hand-held portion by at least one snapping mechanism" as claimed in Claim 9.

Therefore, the newly added Claims 6-9 are patentable over Nightingale, O'Hara et al., Domingue.

In view of the foregoing, the application is believed to be in condition for allowance. Entry of the amendments and issuance of a Notice of Allowance is therefore respectfully requested. If any additional fee is required, please charge Deposit Account Number 502751.

Respectfully submitted,

July 20, 2004
Date

Po-Chao Tan

July 20, 2004
Date

Yen Liu